Instructions

[Refer to Section D of ES-401 and Appendix B for additional information regarding each of the following concepts.]

- 1. Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.
- 2. Enter the level of difficulty (LOD) of each question using a 1 5 (easy difficult) rating scale (questions in the 2 4 range are acceptable).
- 3. Check the appropriate box if a psychometric flaw is identified:

AN1-2009-01

- The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
- The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc).
- The answer choices are a collection of unrelated true/false statements.
- The distractors are not credible; single implausible distractors should be repaired, more than one is unacceptable.
- One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).
- 4. Check the appropriate box if a job content error is identified:
 - The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content).
 - The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory).
 - The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
 - The question requires reverse logic or application compared to the job requirements.
- 5. Check questions that are sampled for conformance with the approved K/A and those that are designated SRO-only (K/A and license level mismatches are unacceptable).
- 6. Enter question source: (B)ank, (M)odified, or (N)ew. Check that (M)odified questions meet criteria of ES-401 Section D.2.f.
- 7. Based on the reviewer's judgment, is the question as written (U)nsatisfactory (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- 8. At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).

| | 1. | 2. | 3 | . Psycl | nomet | ric Flaw | 'S | 4. | Job Cont | ent Fla | aws | 5. O | ther | 6. | 7. | 8. |
|-----------------|--------------|--------------|---------------|---------|-------|----------------|---------|--------------|----------|-------------|---------------|-----------|-------------|-------|-------|---|
| Q# | LOK (F/H) | LOD (1-5) | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job- Link | Minutia | #/ units | Back- ward | Q= K/A | SRO Only | B/M/N | U/E/S | Explanation |
| <mark>7N</mark> | Н | 3 | | | | | Е | | | | | | | | Е | A, CR, 43.5. Recommend the stem be changed to "which operating procedure actions should first be implemented." |
| 8B | Н | 2 | | | | | U | | | | | | | | E | D, OR, 43.2. This question is unsatisfactory because the correct distractor does not include all the required actions (restore operability within 14 days) and is therefore technically also incorrect. Also, need to consider the affect on EDG operability (TS 3.8.1/2) |
| <mark>9N</mark> | Н | 2 | | | | | | | | | | | | | S | D, OR, 43.5. |
| 10B | Н | 3 | | | | | | | | | | | | | S | C, CR, 43.5. |
| 11M | Н | 3 | | | | | | | | | | | 5 | | | A, CR, 41.10. This is considered an RO question since it tests on the entry conditions to the reactor trip procedure. |
| 12N | Н | 2 | | | | U | | | | | | | | | S | B, OR, 43.2. See unsat comment for question #5SAT after discussion w/ license |
| 13N | Н | 2 | | | | | | | | | | | | | S | D, CR, 41.10. This question is considered unsatisfactory because it tests on an initial entry condition which makes it an RO question. SAT after discussion w/ license |
| 14N | Н | 3 | | | | | | | | | | | | | 8 | D, CR, 43.5. This question is a KA mismatch because it has nothing to do with main feedwater as required by the KASAT after discussion w/ license. |
| 15N | Н | 3 | | | | | U | | | | | | | | Е | C, CR, 43.5. According to step 9.2.2 and the preceding note of procedure 1104.027, Tech Spec 3.8 applies. |
| 16N | Н | 1 | | | | U | | | | | | | | | 8 | C, CR, 43.2. This question appears to be a direct lookup. If this is a "from memory" question, it is ok as written. SAT after discussion w/ license |
| 17B | F | 2 | | | | | | | | | | | | | S | B, CR, 41.10. This question is unsat because it tests on the system operation and procedure entry conditions. SAT after discussion w/ license |
| 18N | Н | 3 | | | | | | | | | | | | | S | B, CR, 41.10. This question is unsat because it tests on the system operation and procedure entry conditions. SAT after discussion w/ license |
| 19B | F | 2 | | | | | | | | | | | | | S | C, CR, 43.7. |
| 20N | F | 2 | | | | | | | | | | | | | S | D, CR, 43.7. |
| 21N | F | 3 | | | | | | | | | | | | | S | A, CR, 43.2. |
| 22B | Н | 2 | | | | | | | | | | | J | | J | B, CR, 41.10. This is a basic radworker question and not an SRO question. Recommend an emergency director question. (Will replace) |
| 23B | Н | 3 | | | | | | | | | | | | | S | A, CR, 43.5. |
| 24B | Н | 2 | | | | | | | | | | | | | S | C, CR, 41.10. This is an RO question since it is testing on the entry conditions to the |

| | 1. | 2. | 3 | . Psycl | homet | ric Flaw | S | 4. | Job Cont | aws | 5. O | ther | 6. | 7. | 8. | |
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| Q# | LOK (F/H) | LOD (1-5) | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job- Link | | #/ units | Back- ward | Q= K/A | SRO Only | B/M/N | U/E/S | Explanation |
| Ī | | | | | | | | | | | | | | | | EOP. SAT after discussion w/ license |
| 25B | F | 2 | | | | U | | | | | | | | | Е | D, CR, 43.5. This is considered unsatisfactory because it is intuitive that given there is only one correct answer, the highest EP classification must be correct. (Will Replace) |
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Attachment 8 Page 3 of 7 OBDI 202 – IOLE Process

| _ | 1. | 2. | 3 | . Psycl | homet | ric Flaw | s | 4. | Job Cont | aws | 5. O | ther | 6. | 7. | 8. | |
|----|--------------------|--------------------|---------------|---------|-------|----------------|---------|--------------|----------|-------------|---------------|-----------|-------------|-------|-------|-------------|
| Q# | 1. LOK (F/H) | 2. LOD (1-5) | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job- Link | Minutia | #/ units | Back- ward | Q= K/A | SRO Only | B/M/N | U/E/S | Explanation |
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Attachment 8 Page 4 of 7 OBDI 202 – IOLE Process

| | 1. | 2. | 3 | . Psycl | homet | ric Flaw | s | 4. | Job Cont | aws | 5. O | ther | 6. | 7. | 8. | |
|----|--------------------|--------------------|---------------|---------|-------|----------------|---------|--------------|----------|-------------|---------------|-----------|-------------|-------|-------|-------------|
| Q# | 1. LOK (F/H) | 2. LOD (1-5) | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job- Link | Minutia | #/ units | Back- ward | Q= K/A | SRO Only | B/M/N | U/E/S | Explanation |
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Attachment 8 Page 5 of 7 OBDI 202 – IOLE Process

| | 1. | 2. | 3 | s. Psyc | homet | ric Flaw | /S | 4. Job Content Flaws | | | | | ther | 6. | 7. | 8. |
|-----|--|--------------|---------------|--------------|--------|----------------|-----------------|----------------------|---------|-------------|---------------|-----------|-------------|-------|-------|-------------------|
| Q# | LOK (F/H) | LOD (1-5) | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job- Link | Minutia | #/ units | Back- ward | Q= K/A | SRO Only | B/M/N | U/E/S | Explanation |
| 98 | | | | | | | | | | | | | | | | |
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| 100 | | | | | | | | | | | | | | | | |
| | B= F= E= | | | | | | | | | | | | | | | |
| | RO | TOTA | LS: | : M= | | | | H= U= | | | | | | | | Additional Notes: |
| | | | | | N= | | | | | | | | | | | |
| | | | | | B= | 9 | | F= | 5 | | E= | 1 | | | | |
| | SRC | ATOT C | LS: | | M= | 1 | | H= | 20 | | U= | 15 | | | | Additional Notes: |
| | N= 15 | | | | | | | | | | | | | | | |
| | GENERAL COMMENTS: | | | | | | | | | | | | | | | |
| 1. | I. Bank questions are indicated by <mark>B</mark> ; Modified are indicated by <mark>M</mark> ; New questions are indicated by <mark>N</mark> . | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 2. | Chief E | xamıne | er com | nents | are ir | ndicate | d in <i>blu</i> | ie. | | | | | | | | |
| 3. | Average | e diffic | ulty is _ | <u>na</u> | | on the | e RO e | xam a | nd2 | 2.5 | on the | SRO | exam. | | | |
| 4. | The 100 | CFR55 | .41/43 | distrib | oution | is: RC |) / SR | .0 | | | | | | | | |
| | 41.1 = | | | 43.1 | = 0 | | | | | | | | | | | |
| | 41.2 = 41.3 = | | | 43.2 43.3 | | | | | | | | | | | | |
| | 41.4 = | | | 43.4 | | | | | | | | | | | | |
| | 41.5 = | | | 43.5 | | | | | | | | | | | | |
| | 41.6 = 41.7 = | | | 43.6 43.7 | | | | | | | | | | | | |
| | 41.7 = 41.8 = | | | 43.7 | = 2 | | | | | | | | | | | |
| | 41.9 = | | | | | | | | | | | | | | | |
| | 41.10 = (| 6 | | | | | | | | | | | | | | |
| | 41.11 = 41.12 = | | | | | | | | | | | | | | | |
| | 41.13 = | | | | | | | | | | | | | | | |
| | 41.14 = | | | | | | | | | | | | | | | |
| 5. | The | e answ | er dist | ributio | n is: | RO / | SRO | | | | | | | | | |
| 1 | | : na / 6 (| | | | | | | | | | | | | | |

B = na / 6 (24%) C = na / 6 (24%) D = na / 7 (28%)

- There are <u>4</u> questions with indicated attachments provided.
- There are 20 (80%) higher cognitive questions. This is considerably higher than the 60% ceiling recommended by NUREG-1021.
- The SRO questions were reviewed by S. Garchow on 11/24/2008.